

Recycling Fact Sheet #1

Single Sort Recycling

What is the current Waukesha County recycling system?

Since 1991, the County has operated a “dual stream” recycling program, where paper and cardboard are separated from bottles and cans by residents and set out for collection in blue bins (right). A private hauler collects these recyclables from 25 partner communities in trucks with two compartments and delivers it to the County MRF in Waukesha. There, the recyclables are deposited in two designated areas of the tip floor and then sorted and baled by material type through two separate “streams” in the facility (paper and containers).



What is single sort recycling?



In a single sort recycling system, residents simply separate recyclables from trash, but no further sorting of recyclables is done. Paper, cardboard, bottles, cans, and other recyclable materials are all mixed together, usually in a large, wheeled cart. The hauler picks up the cart with an automated lifting arm extending from the truck and places the material in a single compartment. The recyclables are delivered to a material recovery facility (MRF) in a single drop-off area. The materials then pass through a highly automated processing system and are sorted into individual marketable commodities. As of 2012, about half of all MRFs nationwide have switched to a single sort system because of its many advantages.

What are the advantages of single sort recycling?

For residents, single sort simplifies the recycling process because no sorting, bundling, or bagging of recyclables is required. The larger carts hold up to five times more recyclables than the current blue bins, but no lifting is required because the carts have wheels. More types of materials, such as plastics #1-7, are also able to be recycled. All together, these conveniences have proven to be very popular with residents and usually lead to significant increases in recycling rates.

For haulers, the automated cart pick-up by a mechanical arm avoids injuries to their workers and significantly improves the efficiencies of the routes, allowing many more pickups in the same amount of time than the labor intensive blue bin system. Since recyclables no longer need to be separated into two truck compartments, haulers can use the same compactor trucks for either trash or recycling collection, saving on equipment costs. Compacting recyclables also allows more material to be picked up per route.



For communities, single sort can lead to a cost savings because: 1) the increased capacity of the larger carts allows for every-other-week recycling pickup instead of the current weekly system; 2) increased recycling rates by residents translates to reduced trash collection and landfill disposal fees; and 3) more haulers offer single sort collection service in the area, offering more competition on local collection contracts. One other advantage to the cart system is improved community aesthetics on collection day - a single recycling cart has a lid that prevents blowing of materials in the neighborhood.

What are the disadvantages of single sort recycling?

The main disadvantage of switching to single sort is the increased processing costs at the MRF because it requires all new, highly automated and costly equipment (see Fact Sheet #2). While recycling rates will likely improve, the ease of single sort recycling for the resident may also result in higher rates of non-recyclable material (“residue”) being delivered to the MRF. An effective public education program will help to reduce this problem.

The larger carts used in single sort collection are also more costly than the current blue bins. Purchasing carts is estimated to cost over \$4 million for the 89,300 households among the 25 participating communities. The county is currently researching options for purchasing or “leasing” these carts. Cart maintenance options are also being evaluated. These carts have 10-year warranties, but may require maintenance, depending on their use. Also, some residents don’t have room to store the larger cart, resulting in more outdoor storage. Up-the-drive service presents additional challenges because automation of this service may not be available, ruling out the use of the large carts.

Why is Waukesha County Switching to Single Sort?

In short, the pros of single sort far outweigh the cons - and all the local private haulers already made the switch. Since 2007, the County conducted a series of studies that all strongly recommended switching to a single sort system. These studies also pointed out that the best way to deal with the higher processing costs for single sort material was to combine recyclable tonnage with the City of Milwaukee, taking advantage of the economies of scale. As a result, the County and City issued a joint request for proposals (RFP) in late 2013 to process and market single sort recyclables from the two communities.

When will the County Switch to Single Sort?

The above noted RFP resulted in an intergovernmental agreement with the City of Milwaukee and contract with a private company to process single sort recyclables, now scheduled to be operational in January 2015. More information on this can be found in *Fact Sheet #2 – Joint City/County MRF*.

